

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/053,353	AFEYAN ET AL.	
	Examiner Wilbert L. Starks, Jr.	Art Unit 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS**. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the mailing of 02/17/2006.
2.  The allowed claim(s) is/are 145-165 (renumbered 1-21).
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

**DETAILED ACTION**

***Reasons For Allowance***

1. Claims 145-165 are allowed.

2. The following is an Examiner's statement of reasons for allowance:

The cited prior art taken alone or in combination fails to teach the claimed invention of using evolutionary algorithms to search for product forms that reflect the relative affinities of consumers. Specifically, independent claims 145, 154, 155, and 165 disclose the creation of a "derived group" in describing how the evolutionary algorithms are to be used to modify the forms of the products to match the relative affinities of the consumers. Reading the claims in light of the Specification, the act of "deriving" the group is further defined on page 67, lines 15-22 of the Specification when it discusses the "design search space" in the context of "focus window sampling." Additionally, it is further defined on page 76, lines 13-28 and page 77, lines 1-16 when it discusses the "design exercise" with respect to the claimed invention's "R-space."

The closest prior art of Cunningham, et al. (U.S. Patent Number 6,029,139; dated 22 FEB 2000; class 705; subclass 010) teaches a method and apparatus for optimizing promotional sale of products based upon historical data but fails to teach or suggest the creation of a "derived group" as defined in the present application where it describes the act of "deriving" the group as further defined on page 67, lines 15-22 of the Specification when it discusses the "design search space" in the context of "focus window sampling."

Additionally, as further defined on page 76, lines 13-28 and page 77, lines 1-16 when it discusses the "design exercise" with respect to the claimed invention's "R-space." To the extent that these features are not present in the art cited by Examiner, the present case is found to be allowable over the art of record.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Alternatively, inquiries may be directed to the following:

**S. P. E. David Vincent**      **(571) 272-3080**

**Official (FAX)** (571) 273-8300

*Silas F. Smith, Jr.*

**Wilbert L. Starks, Jr.  
Primary Examiner  
Art Unit 2129**

WLS

01 October 2006